

Directions:

Evaluate the student by checking the appropriate number or letter to indicate the degree of competency. The rating for each task should reflect **employability readiness** rather than the grades given in class.

Rating Scale:

- 3 Mastered** – can work independently with no supervision
2 Requires Supervision – can perform job completely with limited supervision
1 Not Mastered – requires instruction and close supervision
N No Exposure – no experience or knowledge in this area

NOTE: * = Core competencies (essential for the first day on the job).

| 3 | 2 | 1 | N | A. Basic Computer Concepts | Notes: |
|---|---|---|---|---|--------|
| | | | | *1. Demonstrate ethical conduct in everyday procedures (e.g., piracy, licensing, intellectual property, etc.) | |
| | | | | *2. Use basic computer terminology correctly | |
| | | | | *3. Identify parts of a computer (components and media) | |
| | | | | *4. Identify components of the information system model (input, process, output, storage) | |
| | | | | 5. Compare mainframes, minicomputers, scientific workstations and microcomputers | |
| | | | | *6. Differentiate between common operating systems, including file systems | |
| | | | | *7. Perform basic computer filing tasks (e.g., naming, saving, deleting, and moving files) | |
| | | | | Other: | |

| 3 | 2 | 1 | N | B. Networking Concepts | Notes: |
|---|---|---|---|--|--------|
| | | | | *1. Use networking terminology correctly | |
| | | | | 2. Draw, label, and explain functions of networking layers (OSI) | |
| | | | | *3. Identify parts of a network | |
| | | | | *4. List the functions of a network operating system (NOS) | |
| | | | | *5. Identify types of networks (e.g., LAN, WAN, MAN) | |
| | | | | *6. Identify shared network resources (e.g., hardware, software) | |
| | | | | *7. Log on/off successfully | |
| | | | | *8. Access shared network resources (e.g., hardware, software files) | |
| | | | | 9. Describe capabilities of network wiring systems | |
| | | | | 10. Explain network topologies (e.g., star, bus, ring, broadband, baseband) | |
| | | | | 11. Diagram network topologies (e.g., star, bus, ring, broadband, baseband) | |
| | | | | 12. Explain principles of basic network security (e.g., IP spoofing, packet sniffing, password compromise, encryption) | |

| | | | | | |
|--|--|--|--|--|--|
| | | | | 13. List advantages and disadvantages of decentralized computing | |
| | | | | 14. Document network configurations (e.g., workstation, server, router, replication) | |
| | | | | 15. Identify types of licensing agreements | |
| | | | | 16. Explain current network standards and pseudo-standards (e.g., IEEE, RFCs, ISO) | |
| | | | | Other: | |

| | | | | | |
|----------|----------|----------|----------|---|---------------|
| 3 | 2 | 1 | N | C. Safety | Notes: |
| | | | | 1. List features of an ergonomically correct workstation | |
| | | | | 2. Describe the operation of fire suppression resources including fire extinguishers | |
| | | | | 3. Identify electrical, mechanical, chemical, and environmental hazards | |
| | | | | *4. Practice workplace safety (e.g., first aid, eye protection, anti-static procedures) | |
| | | | | *5. Demonstrate proper use of hand tools | |
| | | | | *6. Demonstrate proper use of electrically operated equipment including grounding | |
| | | | | Other: | |

| | | | | | |
|----------|----------|----------|----------|---|---------------|
| 3 | 2 | 1 | N | D. Communications | Notes: |
| | | | | *1. Present solutions in a positive, tactful manner | |
| | | | | *2. Practice constructive problem solving with customers | |
| | | | | *3. Explain concepts of remote access and phone support | |
| | | | | *4. Describe software and hardware tools to support individuals with disabilities | |
| | | | | *5. Explain the need for network policy documentation | |
| | | | | *6. Create basic user and/or network administrator documentation | |
| | | | | *7. Demonstrate effective telephone support skills | |
| | | | | 8. Present an oral proposal for a network installation | |
| | | | | 9. Prepare a written request for proposal | |
| | | | | 10. Create technical correspondence | |
| | | | | Other: | |

| | | | | | |
|----------|----------|----------|----------|--|---------------|
| 3 | 2 | 1 | N | E. Hardware | Notes: |
| | | | | *1. Verify operation of common peripherals | |
| | | | | *2. Install and uninstall common peripherals | |
| | | | | *3. Install a network adapter | |
| | | | | *4. Install and configure a network concentrator/hub | |

| | | | | | |
|--|--|--|--|---|--|
| | | | | *5. Install and configure a modem | |
| | | | | *6. Perform basic hardware upgrades (e.g., hard drive, CD-ROM, memory, video and sound cards) | |
| | | | | 7. Specify internal components for a network server | |
| | | | | 8. Differentiate between routing and switching/bridging | |
| | | | | 9. Differentiate between various current protocols (e.g., TCP/IP, IPX/SPX, NETBEUI, DHCP) | |
| | | | | *10. Identify industry standard workstation hardware systems | |
| | | | | 11. Compare current industry standard busses | |
| | | | | 12. Identify industry standard server hardware systems | |
| | | | | Other: | |

| | | | | | |
|----------|----------|----------|----------|---|---------------|
| 3 | 2 | 1 | N | F. Connectivity | Notes: |
| | | | | 1. Attach a connector to the end of a cable successfully | |
| | | | | 2. List the advantages and disadvantages of different topologies | |
| | | | | 3. Explain advantages and disadvantages of wireless technologies | |
| | | | | 4. Explain the difference between standard analog and digital lines | |
| | | | | *5. Interpret network diagram | |
| | | | | 6. Explain different functions of network communications equipment (e.g., modems, DSUL/CSU, bridges, switches, routers, hubs) | |
| | | | | 7. Implement asynchronous connectivity (e.g., Internet, Intranet, dial-up, SLIP, PPP) | |
| | | | | 8. Differentiate areas of responsibilities between the telecommunications providers' responsibilities and their clients' responsibilities | |
| | | | | Other: | |

| | | | | | |
|----------|----------|----------|----------|--|---------------|
| 3 | 2 | 1 | N | G. Software | Notes: |
| | | | | *1. Analyze and modify system configuration files | |
| | | | | *2. Launch an application | |
| | | | | *3. Install and verify device drivers | |
| | | | | *4. Perform basic software upgrades | |
| | | | | *5. Establish client environments to utilize network resources | |
| | | | | *6. Implement virus protection and removal procedures for a network | |
| | | | | *7. Implement virus protection and removal procedures for a stand-alone computer | |

| | | | | | |
|--|--|--|--|--|--|
| | | | | *8. Use file compression programs | |
| | | | | 9. Install and configure operating systems | |
| | | | | Other: | |

| 3 | 2 | 1 | N | H. Network Operations | Notes: |
|---|---|---|---|---|--------|
| | | | | *1. Demonstrate the ability to access the Internet | |
| | | | | *2. Create and delete user groups and aliases | |
| | | | | *3. Implement secured access to network resources | |
| | | | | *4. Describe procedures that are executed through login scripts | |
| | | | | *5. Create printer queues | |
| | | | | *6. Enable printer capture | |
| | | | | *7. Maintain printer queues | |
| | | | | *8. Perform backup procedures | |
| | | | | *9. Restore files successfully | |
| | | | | *10. Maintain operational logs (e.g., maintenance, security, transaction) | |
| | | | | *11. Maintain data availability (e.g., rights and trustees) | |
| | | | | *12. Create a customized login script | |
| | | | | *13. Install a print server | |
| | | | | *14. Install remote printing | |
| | | | | *15. Implement various current protocols (e.g., TCP/IP, IPX/SPX, NETBEUI, DHCP) | |
| | | | | Other: | |

| 3 | 2 | 1 | N | I. System Risk Management | Notes: |
|---|---|---|---|---|--------|
| | | | | *1. Describe backup procedures | |
| | | | | *2. Describe the importance of system security (e.g., passwords, user accounts) | |
| | | | | *3. Demonstrate forms of network security (e.g., passwords, user accounts) | |
| | | | | 4. Explain the concept of firewall usage | |
| | | | | *5. Discuss virus protection procedures on a network | |
| | | | | 6. Identify system management software | |
| | | | | *7. Perform console operations | |
| | | | | 8. Perform site survey | |

| | | | | | |
|--|--|--|--|---|--|
| | | | | 9. Develop a disaster recovery plan | |
| | | | | 10. Analyze licensing requirements | |
| | | | | 11. Compare directory services | |
| | | | | *12. Evaluate equipment for purchase | |
| | | | | 13. Recommend different levels of fault tolerance (e.g., transaction tracking/logging, auditing, uninterruptible power sources [UPS], mirroring, duplexing, redundant array of inexpensive disks) | |
| | | | | 14. Design and implement a network security system | |
| | | | | Other: | |

| | | | | | |
|----------|----------|----------|----------|---|---------------|
| 3 | 2 | 1 | N | J. Troubleshooting | Notes: |
| | | | | *1. Verify client access to network resources | |
| | | | | *2. Utilize existing technical resources for problem resolution (e.g., Internet, technical manuals, e-mail) | |
| | | | | 3. Identify sources of electromagnetic interference | |
| | | | | *4. Use troubleshooting tools to determine problem areas | |
| | | | | *5. Analyze system log files | |
| | | | | *6. Perform and interpret diagnostics | |
| | | | | *7. Troubleshoot printer queues | |
| | | | | *8. Troubleshoot software/hardware integration problems | |
| | | | | Other: | |